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CLAIMS

I claim:

1. A method in a computer system of decompressing data that has been subject to compression and the compressed data being in a set of predetermined data layers, the computer system including a host processor connected via a peripheral bus to a secondary processor, the method comprising the steps of:

decompressing at least a system layer of the compressed data in the host processor; and decompressing other data layers of the set in the secondary processor.

- 2. The method of Claim 1, wherein the secondary processor is a graphics accelerator.
- 3. The method of Claim 1, wherein the secondary processor is a dedicated MPEG decompression circuit for decompression of data subject to MPEG compression.
- 4. The method of Claim 1, wherein the step of decompressing at least a system layer further comprises decompressing a book layer of the set.
- 25 5. The method of Claim 1, wherein the data includes audio and video data.
 - 6. The method of Claim 1, wherein the step of decompressing other data layers includes the steps of:
 variable length decoding the compressed data;
 inverse zig-zagging the decoded data;
 inverse quantizing the zig-zagged data, and
 inverse discrete cosine transforming the inverse quantized data.

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7. The method of Claim 1, wherein the step of decompressing other data layers includes motion vector compensation of the data.

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A computer system adapted for decompression of compressed data which is in a set of predetermined data layers, comprising:

a host processor;

a peripheral bus connected to the host processor,

a secondary processor connected to the peripheral bus; and

means for decompressing in the host processor at least a system layer of the compressed data, wherein other data layers of the set are decompressed in the secondary processor.

9. The system of Claim 8, wherein the secondary processor is a graphics accelerator.

10. The system of Claim 8, wherein the secondary processor is a dedicated decompression circuit for decompression of data which has been compressed using MPEG compression.

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11. The system of Claim 8, wherein the means for decompressing at least a system layer further comprises decompressing means for decompressing a book layer of the set.

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- 12. The system of Claim 8, wherein the data includes audio and video data.
- 13. The system of Claim 8, wherein the means for decompressing at least the system layer includes:

 means for variable length decoding the



compressed data;

means for inverse zig-zagging the decoded data; and

means for inverse quantizing the data.

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- 14. The system of Claim 8, wherein decompression of the other layers of the set includes motion vector compensation of the data.
- 10 15. The computer system of Claim 8, further comprising a frame buffer connected to the secondary processor.